Statewide Vehicle Fleet "Cost Efficiency Plan"

House Bill 110, 2007 Legislative Session
Prepared by the Division of Fleet Operations

Section (1) – Background

In April of 2006 Governor Huntsman announced his goal of increasing the state's overall energy efficiency 20% by the year 2015. During the following 2007 general legislative session House Bill 110 was passed to formalize how agencies with state fleet vehicles will be required to contribute to the stated energy efficiency goal established by the Governor. House Bill 110's title is "State Fleet Efficiency Requirements" but it covers a three-fold objective from the Governor and Legislature. First, the bill is designed to reduce fleet costs or increase energy efficiency. Second and equally important, the bill is intended to improve air quality in Utah by decreasing the carbon output from state vehicles. Finally, the bill is designed to contribute to a general decreased United States dependency on foreign oil.

Section (2) – Purpose of the "Cost Efficiency Plan"

To provide a guide for agencies with state vehicles to:

1. Formally document their annual strategies to increase energy efficiency with their state vehicles.
2. Provide a consolidated reporting mechanism and tracking guide to measure the actual efficiencies accomplished during the previous year by the individual agencies.

Section (3) – Specific goals of the "Cost Efficiency Plan"

Increase overall energy efficiency 20% by 2015 in the state fleet by the following methods:

1. Decrease the overall cost per mile (CPM) average of state vehicles
2. Decrease the number of vehicles in the state fleet
3. Decrease the total gallons of fuel consumed by state vehicles
4. Increase the overall miles per gallon (MPG) of state vehicles
5. Decrease the total miles driven annually by state vehicles
    a. DFO will also monitor "personally owned vehicle" (POV) mileage reimbursements to verify a true total reduction of state miles traveled annually.

Other "Goals"

6. "Right size" state vehicles to the lowest level vehicle type needed to perform the state business required. This will be measured in the manufacture stated miles per gallon at replacement time and will compare the existing vehicle class' average MPG to the MPG average of the replacement class vehicle.
7. Decrease the overall pollution output by the state fleet (Measured in carbon emission from the vehicle).

The individual measures listed above will be added together against the overall energy efficiency goal of 20% (Items 1-5 above must equal at least 20%). Goal 6 is part of the larger measure in goal number 4. Goal 7 is not officially contributing to the 20% energy

efficiency goal but is a significant result of the energy efficiency effort and will be measured annually.

Section (4) – Guide to the agency plans and reporting

Agency Plans

Each year by October 1st every state agency with at least one state vehicle is required to submit a bulleted list of planned energy efficiency actions to be carried out by the following June 30th. Action plan details can include further explanations as appropriate beyond the bulleted list. See Section 7 below for a list of suggested energy efficiency strategies approved by Fleet Operations.

Reporting

Each year by October 1st, every state agency with at least one state vehicle is required to submit a bulleted list of completed energy efficiency actions carried out during the previous fiscal year (July 1 to June 30). Reporting details can include further explanations as appropriate beyond the bulleted list.

Annual plans and reports will be submitted through the "secured web reports" sections of the Fleet Operations web page. To access the page please refer to: **fleet.utah.gov,** Select the "Reports" icon and then the "secured web reports" link. Your FleetFocus login and password will allow you to access and update the energy efficiency plans and reports required in the language of HB110.

Section (5) – Tracking form/user guide

Each year Fleet Operations staff will be tracking the process made in the seven goals outlined above. A single page spreadsheet will record the baseline information by agency and annual measurements against the original baseline number and against the previous year's record. See attachment "A" titled "State Fleet Cost Efficiency Tracking Document." A copy of this document will be forwarded each November 1st with the state vehicle report to the legislature to update agency process toward the 20% energy efficiency goal created by Governor Huntsman in April 2006.

Tracking form user guide

1. Vehicle cost per mile (per vehicle and per agency)
    a. The goal would be measured at the individual vehicle level (or the replacement vehicle level).
    b. The "life to date" figure will be the data point measured each year.
    c. The baseline for this measurement will be June 30, 2007.
    d. Future snapshots measured against the baseline will be on June 30th (in preparation for the November 1st deadline). Only active vehicles will be included in the snapshot (and will be compared to the original baseline (even if the baseline vehicle is out of service).
    e. Vehicles must have at least 5,000 miles and 6 months in service to be included in the data snapshot (if not the replaced vehicle will be used in the snapshot).
    f. The cost per mile comparison between years will be adjusted for inflation based on the actual fuel, PM, and repair costs.
    g. The cost per mile figure will include depreciation.

2. Total vehicles in the state fleet
    a. The baseline measure will be the November 1, 2006 "State Vehicle Report" prepared by Fleet Operations and submitted to the Utah State Legislature.
    b. DFO will track underutilized vehicles shifted within an agency to avoid the need for expansion. This efficiency will be tracked in the "didn't need to expand" category.
3. Total fuel used (per vehicle and per agency)
    a. The goal would be measured at the individual vehicle level.
    b. The baseline measurement will be from July 1, 2005 to June 30, 2006.
    c. Future snapshots will be taken on June 30th. The annual fuel consumption measurement will always be from July 1st to June 30th.
    d. Fleet staff will comment in the tracking measurements if agencies have a higher fuel consumption because their mission requires it. For example, heavy snow years for agencies like UDOT.
4. Miles per gallon (per vehicle and per agency)
    a. The goal would be measured at the individual vehicle level.
    b. The baseline for this measurement will be June 30, 2006.
    c. Future snapshots will be taken each month during the year, July 1st to June 30th. The average of the miles per gallon will be used to calculate the annual miles per gallon data point.
    d. Vehicles must have at least 5,000 miles and 6 months in service to be included in the data snapshot.
5. Annual miles driven
    a. The goal would be measured at the individual vehicle level.
    b. Miles because of "unique circumstances," like heavy snow years, would be captured separately.
    c. The amount of POV (both miles and dollars) will be tracked in this category to capture the offset of personal miles traveled for state business if there is a decrease in miles traveled in state vehicles.
6. Right size vehicles in the state fleet to the lowest level vehicle needed to conduct state business
    a. At replacement time a justification will be submitted by the agency when a vehicle other than a compact sedan is requested for a replacement vehicle.
    b. The dropdown menu on the replacement list report will lead fleet contacts to choose the lowest level replacement vehicle in every class.
    c. Vehicle reductions will be tracked at the standard class size detail. For example the report would track a replacement reduction of a midsize sedan to a compact sedan.
    d. The measurement for this category will be measured in miles per gallon. The efficiency will be measured in a percent increase in the average miles per gallon stated by the manufacture against the standard replacement vehicle class.
7. Pollution control
    a. Combines the contribution in items 1-6 above
    b. Measures other pollution reductions not covered in items 1-6. For example purchasing a lower emission engine may increase the overall MPG average.

Section (6) – Goals for purchasing the most economically appropriate size and type of vehicle

Fleet Operations has designated the compact sedan as the standard vehicle replacement. See number 6 in the tracking form user guide above.

Section (7) – Cost reductions and efficiency strategies may include:

a. Reduce engine idle time (through control systems, engine warmers, or auxiliary power units, turning off the key after 10 seconds of idling)
b. Drive fewer miles (through combined trips, car pools, net meetings, etc.)
c. Avoid rush hour traffic
d. Reduce aggressive driving
e. Provide proper preventive maintenance including:
    i. Properly inflated tires
    ii. Clean and replace air and other vital filters when manufacturer recommends
    iii. Vehicle tune-ups as appropriate
    iv. When engine MIL (Malfunction Indicator Lamp) illuminates, quickly get vehicle to approved repair shop
f. Purchase fuel from State operated fueling sites:
    i. Unleaded fuel is typically .10 to .12 cents cheaper per gallon at State Operated fuel locations, Bio-Diesel is now available at participating DOT locations
g. Use the lowest octane fuel required for vehicle (Eliminate the use of Mid and High-Grade fuels when not necessary)
h. Rightsizing vehicle type or engine/transmission configuration
    i. Reduce vehicle size to allow better MPG rating ie. Full-size SUV, 15.5 average MPG, with a minivan, 22.5 average MPG, fuel save would equal 1806 gallons
    ii. Downsize engine configuration (5.7 liter V8 to a 4.8 liter V8, or a V8 to a V6)
    iii. Implement diesel applications where cost effective
        1. Diesel engines are 15 – 20% more efficient than a similar gas counter-part.
        2. Diesel fuel is more energy dense, and contains about 15% more energy per gallon.
i. Reduce the number of commute and take home drivers in the state fleet. According to AAA each mile driven can cost 52.2 cents.
j. Reduce the wind resistance on your vehicle
k. Promote efficient speeds.
    i. 55 MPH is the ideal speed for vehicle efficiency
l. Promote the use of Cruise Control where appropriate
m. Remove excess vehicle weight.
    i. An extra 100 pounds in your vehicle could reduce your MPG by up to 2%
n. Use the recommended grade of motor oil

You can improve your gas mileage by 1-2 percent by using the manufacturer's recommended grade of motor oil. For example, using 10W-30 motor oil in an engine designed to use 5W-30 can lower your gas mileage by 1-2 percent. Using 5W-30 in an engine designed for 5W-20 can lower your gas mileage by 1-1.5 percent. Also, look for motor oil that says "Energy Conserving" on the API performance symbol to be sure it contains friction-reducing additives

Section (8) – Reducing inventories of underutilized vehicles

DFO will be requiring agencies to turn in vehicles that are not driving a minimum of 625 miles per month and are not documented as a "low use" vehicle. The review of miles will be evaluated on an annual basis by DFO. Agencies will continue to receive a quarterly utilization report from DFO showing the average miles per month for the previous 12 months.

Section (9) – Education to inform drivers of their accountability on implementing cost reduction measures.

Agency fleet contacts have a responsibility to train and educate drivers in their agency concerning the energy efficiency plans determined each year by the department leadership. Agency fleet contacts also have the responsibility to track the progress made by the agency toward energy efficiency and make further educational outreach efforts to drivers that are resistant to energy efficiency plans, outlined each year by the agencies leadership and fleet contact.

Attachment A -- State Fleet Cost Efficiency Tracking Document

Agency	Year	Improvement against the Baseline and Previous Year	(1) Cost Per Mile	(2) Total Vehicles		(3) Total Fuel Dispensed			(4) Miles Per Gallon	(5) Annual Miles Driven				(6) Right-size Vehicles	Environmental Benefit / Emission Control Strategies	
				Monthly Active Leased Vehicles	Seasonal Vehicle Totals	Baseline Vehicles	Expan. Vehicles	Total Fuel	Measurement (Billed Miles / Fuel Gallons Dispensed)	"Regular" Miles Billed	Extenuating Circumstance Miles	POV Reimbursement	Total "Miles"	Estimated Fuel Saved (Gallons)	Air Quality Score	Greenhouse Gas Emissions
Agency Name	Base Date	8/7/2007	6/30	FY07	FY07	FY07	N/A	FY07	FY07	FY07	FY07	FY07	FY07	N/A	N/A	N/A
	Base #												-	-	-	
	2008	Year Measurement														
		Against the Baseline														
		Against Previous Year														
	2009	Year Measurement														
		Against the Baseline														
		Against Previous Year														
	2010	Year Measurement														
		Against the Baseline														
		Against Previous Year														
	2011	Year Measurement														
		Against the Baseline														
		Against Previous Year														
	2012	Year Measurement														
		Against the Baseline														
		Against Previous Year														
	2013	Year Measurement														
		Against the Baseline														
		Against Previous Year														
	2014	Year Measurement														
		Against the Baseline														
		Against Previous Year														
	2015	Year Measurement														
		Against the Baseline														
		Against Previous Year														